

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher	ISBN - 0073211869		Publisher - Glencoe/McGraw-Hill	
	Biology (Raven, Johnson)			
	Type - P1	Author - Raven, et al		
	Copyright - 2005	Edition - 7th	Readability - Titles	Not Available for Higher Ed
	Course - Biology		Grade(s) -	9,10,11,12
	Teacher Edition ISBN if applicable			0073256765
Provided by the Publisher				

Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

Basal is strongly aligned to AP Biology curriculum.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☐ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☒ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | | | | |
|---|--|-----------------------------------|---------------------------------|---|
| a) Structure and Transformation of Matter | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input checked="" type="checkbox"/> N/A |
| d) Unity and Diversity | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| e) Biological Change | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| f) Energy Transformation | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| g) Interdependence | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

Kentucky Department of Education
Science Adoption 2008-2014

4) **Content addressed is current, relevant and non-trivial** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) **Provides opportunities for critical thinking/reasoning** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) **Strengths, Weaknesses, Comments:**

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

a) Evidence is strong as it applies to Organic Chemistry and Biochemistry.
f) Evidence is strong, but nothing on nuclear reactions or wave behavior
There are application and understanding questions at the end of the chapter. essay questions at the end of the chapters in the teacher's edition. The instructor's manual has a section on student misconceptions and common pitfalls.

B. Functionality & Suitability

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) **Suitability** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) **Content quality** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) **Connections to Literacy**

Note: may apply to either student or teacher editions

☒ Strong ☐ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) **Connections to Technology** ☐ Strong ☒ Moderate ☐ Little

Kentucky Department of Education
Science Adoption 2008-2014

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☐ Moderate ☒ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

There is a list of objectives at the beginning of the chapter. vocabulary words are in bold. There is a review at the end of the chapter. There are concept outlines and concept reviews for pre and post reading. This is an advanced text. Web resources are provided in the Instructor's Manual, well-known good sites. The online resources provide opportunities for online bio labs, data collection and inquiry activities.

C. Supports Inquiry and Skill Development

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Promotes Inquiry, research and Application of Learning

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

The instructor's manual has suggestions for research and experiments. Many graphs, charts and diagrams are throughout the student edition. The student has an "apply Your knowledge" and "test your visual understanding" at the end of each chapter. The online resources provide opportunities for online bio labs, data collection and inquiry activities.

D. Supports Best Practices of Teaching and Learning

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☒ Strong ☐ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Opportunities for real-life experiments are provided in virtual learning environments, online. Multiple means of assessment are provided: application, critical thinking, essay questions, multiple choice. Well-aligned with AP Biology course requirements.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners

Kentucky Department of Education
Science Adoption 2008-2014

- Presents chapters/lessons in an organized and logical sequence
 - Provides clearly stated objectives for each lesson.
 - Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
 - Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
 - Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
 - Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
 - Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text) ☐ Strong ☐ Moderate ☒ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Every chapter of this basal has the concept Outline and Concept Review. Every new vocabulary is in bold print, with an extensive glossary at the end of the student edition. No other items are essential.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

- ☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Instructor's Manual does not have an index. Chapter objectives, key terms, strategies, listed for each chapter. Student misconceptions and common pitfalls, also activities are strengths.